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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,647	03/17/2004	Christophe Szabo	003301-128	1690

21839 7590 01/25/2007  
BUCHANAN, INGERSOLL & ROONEY PC  
POST OFFICE BOX 1404  
ALEXANDRIA, VA 22313-1404

EXAMINER
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MAI, NGOCLAN THI

ART UNIT	PAPER NUMBER
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1742

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/25/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/801,647

Applicant(s)

SZABO ET AL.

Examiner

Ngoclan T. Mai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1, 3-12 and 14-22 is/are pending in the application.
- 4a) Of the above claim(s) 8-12, 19-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-7 and 14-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. Amendment filed 10/25/06 has been entered. Claims 1, 8, 14-15 have been amended and claim 2 is cancelled. Currently claims 1, 3-12, 14-22 are pending. Claims 8-12, 19-22 are withdrawn from consideration.
2. Applicant's arguments with respect to claims 1-4, 6-7, 14-18 rejected under 35 U.S.C. 102(b) as being anticipated by Frank (U.S. Patent No. 2,807,542) have been considered but are moot in view of the new ground(s) of rejection.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Applicant is advised that should claims 3 and 4 be found allowable, claims 14 and 15 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

### ***Claim Rejections - 35 USC § 103***

5. Claims 1, 3, 4-7 and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frank (U.S. Patent No. 2,807,542).

Frank discloses a powder metal composition for producing an alloy product comprising a pre-alloy powder comprising 71.4% Co and 28.4 Cr chromium admixing with approximately to 1.0% graphite and 24.7% tungsten powder, claim 1. Note that less 0.3% by weight C (recited in claim 1). 0.1% by weight C (recited in claims 4, 15-16), or less than

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0.05% by weight C (claim 17) reads on "0" percent C. As for the limitation "irregularly shaped particles", since particles of the pre-alloy powder disclosed must have some shape, whatever shape they are, the particles of the powder reads on the claimed irregularly shaped particles absent of recitation of any specific shape.

Frank differs from the claims in that Frank does not specifically teach include W in the prealloy powder of Co and Cr.

Frank however teaches that in mixing and combining powder of various metals, it is difficult to alloy all of the desired metal together to obtain the desired end alloy, col 2. lines 35-38; Frank therefore teaches prealloy powder of only Cr and Co and prealloy powder of tungsten and molybdenum, col. 2, l. 38-42 and col. 6, l. 37-39. However since then prealloy powder containing Co, Cr, Mo and W are readily made and are available in the industry for making powder metallurgical component, see Crook et al and Del Corso. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ prealloy powder containing all of the metals that are required by Frank for making the powder metal composition for producing powder metal component.

As for claims 3, 14, Frank teaches ingredient such as Fe, Ni, and Mo can be added, col. 6, lines 28-29.

As for claims 5, 6 and 18, Frank discloses tungsten is present in the component in the amount of from 15-50 wt% and graphite in the amount of 0.5 to 8.0 wt%. Thus it would obvious to one of ordinary skill in the art to select tungsten in any portion of the range, including the claimed range, from the broader range disclosed by the Frank to be prealloy as well as graphite from the broad range because Frank finds that tungsten and graphite in the entire disclosed range has a suitable utility. --- Note: Even if a reference teaches a

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preferred range within a broader range, it still does not "teach away" from the claimed invention. See MPEP 2123. Note that other element does not have to be present since the lower limit is zero percentage.

As for claim 7 regarding the further comprising one or more additives, Frank teaches beside metal powder, other elements such as the binder and scavengers can be added, col. 3, lines 13-16.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoclan T. Mai whose telephone number is (571) 272-1246. The examiner can normally be reached on 9:30-6:00 PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

n.m.

ROY KING  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700